

WE CLAIM:

1) A method for identifying the source of a broadcast signal, comprising in combination,

- (a) receiving means for calls from one or more telephones;
 - (b) receiving means for one or more broadcast signals;
 - (c) means for matching all or part of the content of said received telephone calls to all or part of the content of said received broadcast signals;
 - (d) decision means for selecting the source of broadcast signals based on the degree of match between said all or partial content of said received telephone calls and said all or partial content of said received broadcast signals.
- 2) The broadcast-signal identification method of claim 1 wherein a telephone is a mobile telephone.
- 3) The broadcast-signal identification method of claim 1 wherein the received broadcast signal is a radio broadcast.
- 4) The broadcast-signal identification method of claim 1 wherein the received broadcast signal is the audio portion of a television broadcast.
- 5) The broadcast-signal identification method of claim 1 wherein the received broadcast signal is a broadcast from a satellite.
- 6) The broadcast-signal identification method of claim 1 wherein the means for matching said content of said received telephone calls to said content of said received broadcast signals is a statistical means.
- 7) The statistical matching means of claim 6 wherein the statistical matching means is cross-correlation.
- 8) The cross-correlation means of claim 7 wherein the cross-correlation is performed at positive and negative relative time lags
- 9) The statistical matching means of claim 6 wherein the statistical matching means is co-spectral analysis.

10)The broadcast-signal identification method of claim 1 wherein the content of the received broadcast signal is an encoded, injected, or embedded survey signal.

11)The broadcast-signal identification method of claim 1 further including associating data related to the identity of a calling telephone.

12)The broadcast-signal identification method of claim 1 further including recording all or part of the content of the received telephone calls and all or part of the content of the broadcast signals.

13)The broadcast-signal identification method of claim 1 further including post-processing of all or part of the content of the received telephone calls and all or part of the content of the broadcast signals.

14)An apparatus for identifying the source of a broadcast signal, comprising in combination,

- (a) digitizer means for digitizing all or part of the audio contents of one or more incoming telephone calls;
- (b) receivers for one or more broadcast signals;
- (c) digitizer means for digitizing all or part of the audio contents of the outputs from said broadcast receivers;
- (d) digital processing means for matching said digitized received telephone calls with said digitized received broadcast signals;
- (e) automated decision means for selecting the source of broadcast signals based on the degree of match between said all or partial content of said received telephone calls and said all or partial content of said received broadcast signals;

15)The apparatus of claim 14 further including automated means for reporting matches between said contents of received telephone calls and said contents of broadcast signals;

16)The apparatus of claim 15 further including automated means for associating said reported matches with broadcast transmitters.

17)The apparatus of claim 16 further including automated means for generating a listenership report.

18)The broadcast-signal identification apparatus of claim 14 wherein the broadcast source selection decisions are associated with demographic information related to the identities of callers making the incoming telephone calls.

19)The broadcast-signal identification apparatus of claim 18 wherein a demographics database is generated by compelling callers to provide demographic information in return for a service.

20)The broadcast-signal identification apparatus of claim 19 wherein said service is traffic information.